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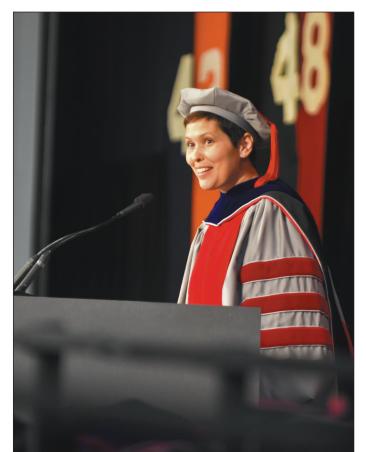
Volume 138, Number 14

Mostly Sunny

SAT: 79°F | 58°F Mostly Sunny

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Friday, June 08, 2018



ALEXANDER JEROME SANDBERG-THE TECH

Professor Candis Callison provides the address to the candidates at the 2018 MIT Hooding Ceremony at the Howard W. Johnson Athletic Center on June 7th, 2018.

New Parental Leave policy for grad students effective Sept. 1

Policy expands existing coverage to include families with children from foster care, adoption, surrogacy

By Sharon Chao

A new Parental Leave policy for graduate students will take effect Sept. 1 so that all parents who have significant responsibilities for a newborn or child newly placed with them through surrogacy, adoption, foster care, or court order will be eligible for one month of leave. Students will be paid during this time if they are supported by an RA, TA, or fellowship.

This new policy will be in addition to the existing two months of Childbirth Accommodation (CBA) provided for only graduate students who give birth ("birth parents").

As of fall 2017, all schools but SHASS paid for an optional third month of leave in addition to CBA, either locally at the department level or centrally via the Dean's Office for the birth parent, according to Mary Markel Murphy, senior associate dean, in an email to The Tech. The Parental Leave policy expands the benefit for eligible birth parents to be up to three months and one month for eligible graduate students who have significant parental responsibilities.

'We want to recognize that everyone plays a role in the family when a new child comes into it," Vice Chancellor Ian Waitz said in an interview with The Tech.

Like CBA, the Parental Leave policy will provide academic and financial support. Academically, parents will not have any responsibilities until their leave is over. "One of the things we've noticed when we talk to students who take advantage of maternity leave is that their advisors still expect them to work, like doing a lot of reading when they have their baby," former Graduate Women at MIT Executive Co-Chair Amanda Kedaigle said in an interview with The Tech. "The new policy states that the leave is a stop of academic and research clocks. Students cannot be required to do anything."

Financially, students supported by an RA, TA, or fellowship will continue to receive the benefits, such as tuition, stipend, and health insurance. However, students who are self-funded are not eligible for tuition or stipend funding. The responsibility for funding Parental Leave will reside at the level of the academic department unless otherwise instructed by the respective school dean's office, according to the new policy.

There are around 60 to 70 births at MIT per year, David Tytell, MIT Medical director of marketing, wrote in an email to The Tech.

The cost of offering one month of paid Parental Leave is about \$8,600 per parent assuming 2017-18 tuition and stipend rates, Murphy said in an interview with The Tech.

The issue of parental leave first came to the administration's attention when the Graduate Student Council and GWAMIT brought

Parental Leave, Page 3

INTERVIEW

The Tech speaks with Sandberg

Commencement speaker talks about her regrets and expresses hopes for the future of MIT's graduates

By Vivian Zhong

CONTRIBUTING EDITOR

Facebook COO Sheryl Sandberg is MIT's 2018 commencement speaker. She has a bachelor's degree in economics from Harvard College and an MBA from Harvard Business School. Sandberg is well-known for founding the Lean In movement to promote female leadership in the workplace. She is also credited with turning Facebook profitable through a lucrative advertising model after joining the company in 2008. Recently, Facebook and Sandberg have come under fire for failing to prevent Cambridge Analytica, a voter-profiling company,

from collecting user information of over 50 million Facebook profiles without the users' permission.

In a short June 6 phone interview with The Tech, Sandberg highlighted the message she wants to convey in her speech and discussed how MIT students contribute to the hope she has for the world. The transcript of the interview has been edited lightly for brevity and clarity.

The Tech: Out of all the commencement speech offers you receive, why did you choose MIT?

Sandberg: MIT is the most revered technical institution. For someone in my industry, getting this invitation is a big honor, and I was really excited about it. I'm also

a huge fan of your president. He and I have met and talked about what kind of leader he is, how he thinks about everything from resilience to the future of technology. So I was honored — very honored to be asked and I said yes pretty much immediately.

The Tech: What have you learned in dealing with the Cambridge Analytica situation over the last few months — the public fallout, the recognition of mistakes - that you think is most important for MIT graduates to know as they pursue their own careers, since a lot of them will

Sandberg, Page 3

Three assault incidents reported in May

DT leaders discourage future 'Study Breaks' in response to sexual assault incident

By Jessica Shi and Sharon

NEWS EDITORS

Last month, Sergeant Andrew Turco issued on behalf of the MIT Police three "timely warning" emails informing the community of assault incidents on campus.

The first timely warning was issued May 7 regarding a sexual assault that happened at a dorm on Amherst Alley May 5 between 12 a.m. and 3 a.m. According to the email, the victim said that she had talked to the male perpetrator at a party at a dorm, and the next moment she remembered was waking up next to him in his dorm room.

The perpetrator denied that any sexual activity had taken place.

Another timely warning was issued May 23 regarding an incident that occurred during a party at the Theta Delta Chi (TDC) fraternity in the early morning hours of May 19. The victim and perpetrator met during the party, and although the victim made clear that she did not consent, the perpetrator sexually assaulted the victim, the email said.

"This incident appears to have taken place during Study Break," Daphne Lin '19 and Claire Nobuhara '19, DanceTroupe (DT) president and show coordinator, respectively,

Assaults, Page 3

IN SHORT

Pre-registration for summer and fall 2018 are now open. The deadline to initiate pre-registration and to make fall CI-H/HW selections is June 18.

MIT Medical is shutting down their current patient portal, Follow My Health, June 8 and launching a new patient portal, HealthELife, June 13. Between June 8 and June 13. students need to call their provider's office to send secure messages and request appointments, and contact their pharmacy directly for prescription refills.

Commencement starts today at 10 a.m., but guests can begin taking their seats starting from 7:30 a.m. Please be aware of road closures from 9:30 to 10:45 a.m., including on Massachusetts Avenue and Amherst Street.

Send news and tips to news@tech.mit.edu.

Biology Department to split required laboratory course 7.02 into a 6-unit class followed by a 12-unit class

The Biology Department recently announced changes to its major requirements, effective Fall 2018. This will involve splitting the 18-unit 7.02 (Introduction to Experimental Biology and Communication) into a 6-unit class followed by a 12-unit class.

In an interview with The Tech, Biology Department Undergraduate Officer Dennis Kim said that these changes result from years of observing students coming to MIT with different lab backgrounds, and seeing a need "to help balance the playing field."

While 7.02 will be continued to be offered Fall 2018 and Spring 2019, it will be completely replaced by 7.002 and 7.003 by the following academic year.

According to Kim, 7.002 will

be geared towards providing first-year and second-year students with lab exposure that will help them obtain UROPs and internships after the semester, teach them introductory molecular biology and experimental setup, and help fulfill the Institute laboratory requirements.

By Sheila Baber

UNLUCKY 7'S

Why a highly rated class shouldn't be discontinued. OPINION, p. 4

FIGS PIZZA

Never trust a round pizza. ARTS, p. 14

OFF TO SEE THE WIZ

Dorothy and co. take the stage in a soulful production. ARTS, p. 16



BOSTON CALLING

A medley of performances at Harvard Stadium.

PHOTO, p. 10

SHARING MY NIGHTMARE

How sexual assault impacted one former student's life. CAM-PUS LIFE, p. 6

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MIT Solve holds annual flagship meeting

Canadian PM Trudeau: 'Diversity is a source of strength, not weakness'

By Jocasta Manasseh-Lewis

STAFF REPORTER

MIT Solve held its annual flagship meeting May 16–18. Participants from 38 countries came to meet and advise the Solver class, made up of the teams who submitted the most promising solutions to the previous year's MIT Solve Challenges. Featured speakers included Mozilla Executive Chairman Mitchell Baker, VEON Chairman Ursula Burns, cellist Yo-Yo Ma, Alphabet Technical Advisor and MIT Visiting Innovation Fellow Eric Schmidt, and Canadian Prime Minister Justin Trudeau.

The event included five plenary sessions, or panel discussions, involving the featured speakers. Trudeau spoke in the plenary titled "True Stories of Starting Up" held May 18.

In the first half of the event, speakers Muhamad Iman Usman, Dean Kamen, Rana el Kaliouby, and Pita Taufatofua were interviewed by Ina Fried, chief technology correspondent for Axios Media. The panelists discussed their personal and professional journeys, including what being an entrepreneur meant to them. Usuman answered, "A person who sees an opportunity and acts on it with confidence ... even when everyone says it is impossible." Kamen defined an entrepreneur as "a schizophrenic — someone who totally believes that everybody is going to see to vision — if you had any idea how frustrating it would be, how much you were going to fail, you wouldn't do it."

In the second half of the plenary, MIT Media Lab Professor Danielle Wood '05 interviewed Trudeau about the place of global change,

diversity, and the educational system in regards to entrepreneurship. "Diversity is a source of strength, not of weakness," Trudeau said. "Having someone alongside you with different perspectives helps you solve a problem."

Trudeau and Wood also spoke about present global challenges, the meaning of leadership in the present day, and the place of problem solving in government. Trudeau stressed the importance of embracing the tremendous shifts due to globalization and the development of technology in the coming years for both Canada and the world's success. "The pace of change has never been so fast ... and will never be this slow again," Trudeau remarked.

MIT Solve presents itself on its website as a "marketplace connecting innovators with resources to solve Global Challenges." The same website states that Solve started in 2015 as "a natural offshoot of MIT's commitment to open technological innovation, and its long commitment to actionable thought leadership in the public sphere."

Solve issues four challenges each year, with this year's being Work of the Future, Frontlines of Health, Teachers and Educators, and Coastal Communities.

In 2017, more than 1,000 people from 103 countries submitted solutions to Solve's challenges. Current Solver teams include Dee Saigal's "Erase All Kittens," an initiative to teach girls coding in a "playful" way, Oren Miron's modification to Auditory Brainstem Response (ABR) tests to enable earlier autism detection, and Grégoire Landel's "CityTaps," which aims to provide running water in every urban

GSC and GWAMIT initiated policy

Parental Leave, from Page 1

forward a proposal in December 2016, in which they compared MIT's current CBA policy to that of other schools. Students in Harvard's Graduate School of Arts and Sciences who are expecting a child either by adoption or childbirth are eligible for twelve weeks of paid leave, with the stipend equal to "two-fifths teaching" for 12 weeks, which was \$6,264 in 2016.

After the administration determined how much a month of parental leave would cost and where the money would come from, GSC and GWAMIT helped draft the policy's language. "I think the administration did a good job allowing for several different situations,

whether you are using a surrogate, adopting a child, or are the birth, or non-birth parent," GWAMIT Executive Co-Chair Molly Bird G said in an interview with *The Tech*. "I worked with them to make sure the wording of the policy was clear, and that as long as grad students fit the criteria of being a new parent and followed the right procedures, their application would be approved."

Waitz announced the new policy in a letter to graduate students last month that also unveiled a new strategic effort to enhance the graduate student experience. "It's nice to have some immediate good news to share as part of a broader strategic effort to address graduate student needs," Waitz said.

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East Side Festival revives Steer Roast, East Campus Day in combined celebration

'The intent ... was to help the East Campus students explore and create an identity'

By Sandhya Kalavacherla

NEWS EDITOR

The East Side Festival, hosted by the East Campus dormitory, took place May 5. The event sought to merge two separate traditional events — the annual Senior House Steer Roast, and the East Campus Day celebration from East Campus — in order to make the event comfortable for both communities.

"The intent of this festival was to help the East Campus students explore and create an identity, especially now that new students from Senior House are a part of East Campus," Maurizio Diaz '20, one of the East Campus representatives in the planning committee for this event, explained in

a phone interview with *The Tech.* "We don't want them to be forced to adopt East Campus culture immediately."

The planning committee consisted of students representing East Campus, students representing Senior House, and alumni. According to Diaz, the committee originally intended to include Random Hall as a part of this year's event but will do so next year.

Diaz also explained that the event sought to strengthen relations between alumni and current East Campus residents. Several alumni of East Campus, including some from MIT's Class of 1962, attended the event with their families.

The festival included a feast,

which included the preparation and consumption of large cuts of meat, mud wrestling, a slang wall, on which alumni wrote slang that was popular during their time at MIT, the "tee-peeing" of the Transparent Horizon sculpture, and the viewing of "nostalgia videos," during which students and alumni watched old i3 videos and video diaries of past East Campus residents.

Each hall in East Campus also had the opportunity to create and display art projects to represent their hall and identities. These projects were funded by Senior House funds. The first floor, for example, created a banner that read, "started from the bottom now we here."

MIT Police don't believe incidents are connected

Assault, from Page 1

wrote in an email to DT members forwarded to *The Tech*.

DT hosted Study Break at TDC starting from 10 p.m. May 18.

Two days later, Lin and Nobuhara sent another email to DT members stating that they believed DT should longer hold Study Breaks because the event did not contribute to their goal of "creat[ing] a safe environment for students to learn how to dance." The email continued, "While we do our best, Study Break is a party. It is difficult to keep 200+ members safe."

Lin, Nobuhara, and Anthony Rosario '19, TDC president and DT social chair, did not respond to requests for comment.

The initial timely warning said that the victim and perpetrator went "back to the perpetrator's bedroom in the fraternity house," but an online update published the following day revised the phrasing to say that the perpetrator led the victim "away from the party into another room."

"The May 23rd timely warning was issued after an MIT employee who is required to report under the Clery Act informed the MIT Police of the incident," Kimberly Allen, MIT's director of media relations, wrote in an email to *The Tech*. "The timely warning was updated on May 24th to revise incorrect information that was initially provided by that reporting party to the MIT Police."

A third timely warning was issued May 27 about an assault and burglary that happened earlier that day at Phi Kappa Theta. The reporting party stated that she was asleep on an upper floor in the house, and she awoke to an

unknown individual touching her leg. He fled before responding officers arrived.

According to the MIT Police, there is no information to indicate that these three incidents are in any way connected, Allen wrote.

The MIT Police also issued timely warning emails about six other incidents in the month of May: burglaries at Burton Connor, Phi Kappa Theta, building E25, and Green Hall; a suspicious person at Pi Beta Phi; and a motor vehicle theft outside Baker House.

"Like all colleges and universities, MIT issues timely warning bulletins in compliance with the federal Clery Act," Allen wrote. This legislation, signed in 1990, is designed to ensure that members of university communities are informed of threats to campus safety.

Sandberg advises grads, 'The future lies in your hands'

Sandberg, from Page 1

have to juggle technology with social interactions?

Sandberg: That's exactly what I'm dealing with. I call this [commencement] speech "Technology Has a Human Heartbeat." And it's about the interaction between technology and people. While it's certainly grounded in and draws upon the experience at Facebook, I'm starting with the lesson I learned at my first job out of college, which is working on a leprosy program in India.

What happened there was that
— you know, leprosy is this Biblical disease where patients were
ostracized for a long time because
the disease spread, and by the time
I started working on this, say, 20
years ago, all the technical challenges had been solved, you can
treat it easily. But people still hid
their disease and didn't come forward for treatment because of the
historical stigma. And so people
who solved the leprosy problem in

India weren't the doctors and technicians. It was the social workers and the local community leaders, who came up with songs and plays to convince people to come forward without fear.

The point of my speech is that it's not the technology, it's the people who use it. It's the teams who build it. So I'm talking about everything from finding the social solutions to the responsibility they have as technologists, to the diversity of the teams we need building this technology.

The Tech: Is there anything you regret in how you handled the situation? There has been criticism suggesting that you didn't act as quickly as you should have.

Sandberg: We know we missed things, and I talk about it — you'll see this is in the speech. We know that we missed things — and you know, it hurts when you miss things. We can look so hard for the good and be so focused on what we're building that we don't see every potential harm. And there's

a line I like in the speech, that we have to remember that what we build is used by people, and people are capable of great beauty and great cruelty. And you have to know that.

The Tech: What keeps you awake at night?

Sandberg: I mean, the things I worry about are how do we build the right teams, how do we build the right product, how do we make our product used for good.

The Tech: And what gives you the most hope in the world?

Sandberg: You know — it's so exciting to do a graduation speech — the last line of my speech is "the future lies in your hands." Because it does! The graduates coming out today — think about the proud history of MIT, from the genome to age research to so many things that have been built there. I look out at that class and think — oh my God, what these people are going to do ... so graduation speeches I think are always very, very hopeful moments



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GUEST COLUMN

The importance of MIT's telemedicine and telehealth class

MIT should continue offering its class on the intricacies of healthcare accessibility

By Katherine Young

Imagine an MIT course to which the students award a median score of 7.0 the highest one on the MIT scale — for the overall course, as well as 7.0 in each of the following categories: Subject's learning objectives were met; Grading thus far has been fair; Stimulated interest; Displayed thorough knowledge of subject matter; and Helped me learn. Imagine this happening for both 2017 and 2018. Also imagine the class comprising of students from diverse majors at all levels, ranging from freshman students to qualified MDs and PhDs from MIT, Harvard, and Wellesley. This is the MIT course that I selected when Dean Chandrakasan recently asked, "Which course has been most useful to you?" Although the class has received overwhelmingly positive feedback from students, it is at risk of not being taught

We are convinced that this model of experiential learning that encourages inclusion of diverse constituencies of students is increasingly appropriate, and more institutional support for such flagship courses deserves consideration. When it comes to working in and with the real world, nothing beats getting your feet wet, and that's what this course helped me to do.

In recent years, researchers and industry partners have worked tirelessly to attain breakthroughs in mobile health, telemedicine, data-driven personalized medicine, interoperable electronic medical records, healthcare apps, and other headlinegrabbing advances. However, nothing in healthcare can move forward at an appreciable scale without the ability to address all the key aspects of the deployment process, not just medical and technical. That's

where 6.884/HST.S58 (Telemedicine and Telehealth for Enhancing Global Health), a research project-based class taught by Amar Gupta, steps into the picture. Every week, Professor Gupta devoted part of the class for students to interact with a distinguished guest on a specific topic, ranging from accessibility in telemedicine to mobile technologies in developing countries. We looked at healthcare from multiple vantage points, including clinical, technical, business, political, and legal ones. One session that stood out to student Ismail Degani covered the topic of accessibility and was led by Judy Brewer, the director of the Web Accessibility Initiative (WAI) at the World Wide Web Consortium (W3C). "Too often we engage in product design while taking for granted the human capabilities of our audiences. Ms. Brewer's lecture revealed a surprising array of potential business opportunities that are open to entrepreneurs who pay close attention to the needs of their users." As for me, I particularly enjoyed Dr. John Halamka's (CIO of Beth Israel Deaconess Medical Center) session on the importance of moving toward precision medicine, as I believe this is an area that MIT graduates are well-equipped to tackle. Final papers showcased the diversity of the students' interests and backgrounds. There were deeply technical computer science papers, including "Deep Learning of Holographic Reconstruction for Breast Cancer Diagnosis" by Ismail Degani and "Predictive Modeling for Telemedicine Service Demand" by Nancy Hung and Agni Kumar. Uma Girkar, a Masters student in EECS, wrote a paper at the intersection of law, data science, and neurology: "Analysis of the Diagnosis of Brain Death With the Support of Teleneurology: A Clinical, Legal, and Data Science Based Approach." Sravya Bhamidipati and Riya Jagetia were moved by current events to examine the issues of institutional neglect in sexual misconduct: "Public Safety in the Age of Larry Nassar: A Computer-Based Antidote to Flawed Oversight in Academia and Medicine." Alicia Chong Rodriguez wrote "Remote Patient Monitoring: A Wireless Garment ECG Cardiac Monitor in the Form Factor of a Brassiere," and is a co-founder of Bloomer Tech. The effects of this course do not end after the final write-up, however. Several startups have come directly out of it. One example that spun out of Gupta's telemedicine class in 2016 is Siuvo, started by Wellesley student Cecilia Shen. Suivo is a specialized app-development company for doctors and patients. A second venture from a former student is TAIWANDR, an online

video consultation company focusing on medical tourism. My talented classmates at MIT seek to influence the future of technology, of medicine, of education, of law, but many of them feel blocked by institutional policies and government regulations. We are convinced that this model of experiential learning that encourages inclusion of diverse constituencies of students is increasingly appropriate, and more institutional support for such flagship courses deserves consideration. When it comes to working in and with the real world, nothing beats getting your feet wet, and that's what this course helped me to do. It's the first class I've taken that has bridged the gap between academia and working in the real world, giving us students a taste of all of the advantages, but also challenges, that come with collaborating across different institutions

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More funding and TA support for classes such as this one would benefit students seeking learning experiences outside the traditional lecture hall, as well as the professors who pour so much effort into them.

So high was the demand for the course that I remember the first session had barely any standing room. And yet, Gupta met with each and every student at their request throughout the semester to guide them in their research endeavors. More funding and TA support for classes such as this one would benefit students seeking learning experiences outside the traditional lecture hall, as well as the professors who pour so much effort into them. Furthermore, more publicity is needed to reach interested students. I only happened upon this class minutes before the first session, and if I hadn't been combing through the course catalog class by class, I never would have found it. Gupta's zeal for "Healthcare for All: Better, Quicker, and Less Expensive" is consistent with MIT's Campaign for Better World and deserves serious attention by the MIT community.

Katherine Young is a member of the MIT Class of 2018 studying Computer Science and Engineering and Music.

CORRECTIONS

A photograph in the May 10 issue of *The Tech* misstated the source of the tradition of TPing the Transparent Horizons sculpture. It is an East Campus tradition, not a Steer Roast tradition.

OPINION POLICY

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Understanding the Palestinian struggle is not difficult Why Palestinians are outraged and why 'dialogue' is not the first step

By Nasir Almasri

Understanding the Palestinian struggle is not difficult, despite what a recent op-ed in *The Tech* suggests. It is quite simple. Israel displaced Palestinians in 1948 and has been the dominant power ever since, while the Palestinians have struggled to survive. One side clearly has the upper-hand and the other side is clearly struggling (but surviving). This is the reason we, as Palestinians, have rejected "engaging in dialogue" and "talking it out" as a first step. I will briefly clarify why this "conflict" is one-sided and then respond to the claims in the op-ed.

Created in 1948, Israel has full sovereignty, a well-established and effective military with top-of-the-line weaponry, tanks, missiles, and nuclear weapons; food and water security; unwavering backing from the United States in terms of diplomatic support (vetoing numerous UN resolutions calling on Israel to stop various violations and moving the US Embassy to Jerusalem, effectively ending the possibility for peace talks) and military support (nearly \$4 billion annually in aid); and - perhaps most importantly - military control of the West Bank and a blockade on Gaza.

Palestinians have none of this. They are not sovereign (meaning they do not fully and solely have control over the territory in which they live); they do not have a military nor access to weaponry to protect themselves; they do not have food or water security; and they certainly do not have any semblance of diplomatic or military support from the United States. They have their bodies and their will to survive, which the international community saw on full display over the last month as the Israeli military killed and injured scores of peaceful protesters in Gaza - peaceful protesters who still returned the next day and continued to stare down the guns that Israeli soldiers held, even after the Israeli Supreme Court ruled that the soldiers could continue to open fire on unarmed civilians

As Palestinians struggle to survive, the Israelis only struggle to maintain the status quo. That's it. That's the whole "conflict." The Israeli state has prioritized its mission to control all of historic Palestine (what now encompasses Palestine and Israel) and has cleansed Palestinians in its way. From the recent targeting of protesters in Gaza to the ongoing destruction of Bedouin villages to the continuing expansion of illegal settlements on Palestinian land, it is easy to see why the blame and pressure is aimed at Israel. They are Goliath, despite their attempt to portray themselves as David. What else needs to be said?

This has been the status quo for 70 years. Systematic and ongoing ethnic cleansing began in 1948 (called the Nakba, meaning "catastrophe", by Palestinians) and continues to this day. Palestinians in the West Bank are living under brutal military occupation; Palestinian Bedouin are being uprooted constantly; those in Gaza have been blockaded since 2005 and constantly

targeted and bombed; those living as Israeli citizens are treated as less than second-class. citizens; those in Jerusalem have no legal status (they are not recognized as citizens by the Israeli or Palestinian governments) and yet can lose their homes because of Israel's new loyalty law; those in refugee camps have continued to live in particularly destitute conditions; and those in the United States have, as Palestine Legal has pointed out, experienced repeated attempts to silence their voices when they merely speak up about the struggle. I should note that the brevity of this summary does little-to-no justice to the struggle the Palestinians have experienced.

One side clearly has the upper-hand and the other side is clearly struggling (but surviving). This is the reason we, as Palestinians, have rejected "engaging in dialogue" and "talking it out" as a first step.

Everything that the Palestinians have done since then has been in response to these injustices. And they have exhausted all means available to them since 1948: they have tried to reckon with the emerging Israeli state, negotiate with it, peacefully resist it by appealing to international bodies and by protesting, and, yes, even turned to violence to fight it, just as any peoples would when they have experienced decades of ethnic cleansing, oppression, dispossession, militarization, mass incarceration, racism, siege, and apartheid.

The playing field is utterly uneven. This is why Palestinians are not interested in "meaningful and constructive" conversations with Israel or its supporters. An oppressor cannot demand that the oppressed engage in conversation; it does not work that way. Israel must cease its siege of Gaza, its military occupation of the West Bank, its practice of child detention, and, more generally, its extensive violations of international human rights law before any real negotiation can begin.

As Palestinians struggle to survive, the Israelis only struggle to maintain the status quo. That's it. That's the whole "conflict."

I repeat: you cannot continue to oppress people and demand they simultaneously engage with you in dialogue. The Israeli government and military have been talking for a long time; if the world is interested in dialogue, they should begin by listening to the Palestinians in their struggle for freedom and dignity. Well-meaning individuals need to understand this. Malcolm X once said that "if you stick a knife in my back nine inches and pull it out six inches, there's no progress. If you pull it all the way out that's not progress. Progress is healing the wound that the blow made. And they haven't even pulled the knife out much less heal the wound." So it is for the Palestinians: the knife is still being jammed in. If progress (including dialogue eventually) is desired, the knife needs to be pulled out and the wound healed before it can begin. Unfortunately, the Israelis re-elected their Prime Minister Benjamin Netanyahu in 2015 on his promise that no Palestinian state would be established.

When Palestine@MIT put up the Mock Wall in front of the Stratton Student Center, we tried to bring attention to these issues and many others. And we did not misrepresent information, despite the claims of the authors of the aforementioned op-ed. First, they claimed that the wall was constructed only to protect Israelis from attacks by Palestinians. But, as the Israeli human rights organization B'Tselem has shown, the wall has been used to help Israel take more Palestinian land, limit Palestinian access to their farms (and, thus, livelihoods), and to cement a system that South Africans have declared is the only apartheid system left in

The playing field is utterly uneven. This is why Palestinians are not interested in "meaningful and constructive" conversations with Israel or its supporters. An oppressor cannot demand that the oppressed engage in conversation; it does not work that way.

Second, they claimed that calling Gaza an "open-air prison" is unfair and that we ignored the fact that Israelis have allowed food aid to enter the territory. This claim is remarkably ludicrous. Gazans want an end to the illegal blockade of Gaza and opportunity to survive, thrive, and live with dignity, not the minimum amount of food aid to survive while the siege continues!

The authors then played the "terrorism card" by pointing fingers at Hamas. This argument is getting old. As human rights attorney and George Mason professor Noura Erakat has made abundantly clear. Palestinian civil society has risen up, banded together, and protested their right to return in the face of Israeli oppression. Blaming Hamas and assuming that Palestinians have absolutely no agency in their actions to protest and demand rights is dehumanizing to Palestinians. The consequence of dehumanizing Palestinian civil society is that it gives Israel the green light to act inhumanely with impunity, simply by accusing Hamas for anything Palestinians do. Palestinians resisted Israel before Hamas' creation in 1987 and have continued to resist it since. Israel has used Hamas as their excuse to collectively punish Palestinians.

Finally, it is important to note the misrepresentation by the authors that the parties involved include "Jews, Palestinians, Bedouins, Christians, and Druze." The Palestinians are a nation, they are generally though not exclusively — Arab in ethnicity and speak Arabic, and, before Israel's creation in 1948, included people of the Jewish, Christian, Druze, and Muslim faiths. Palestinian Bedouin are historically-nomadic peoples but are not otherwise particularly distinct from the Palestinian population atlarge. They all collectively experienced the beginning of ethnic cleansing in 1948 and have continued to experience it in similar manners ever since.

The good news is that the response to Palestine Awareness Week on campus was heartening: people stopped in to understand the Palestinian perspective that is woefully under-represented in the U.S. They asked thoughtful questions and sought resources to learn more about the struggle. Pressure is mounting on Israel as Gazans protest peacefully, as activists call for boycott of Israel and the companies that support its brutality, as more American and Israeli Jews stand in solidarity with Palestinians, and as intellectuals in the US like Professor Erakat continue to call it out on its violations. The turning tide means that Israel will no longer be afforded its carte blanche to act with impunity in Palestine.

One final note is worth mentioning: to constantly and repeatedly explain this narrative is tiring. Writing these articles is exhausting. Can't anybody see what is going on? Does anybody care? Like black Americans and indigenous people in this country and the world over, disregard for our oppression is normal. Our expressions of frustration at the status quo are reprimanded and we are told to express our views only in a way that is comforting to the oppressors and their supporters. Palestinians are repeatedly told to "come to the [uneven] table." Black NFL players are being told to respect the flag of a country that still does not respect them. People must understand why we get angry and why we are disinterested in simply "talking about it." Resolving these issues must prioritize the voices of the oppressed, and not the feelings of the oppressor. If you cannot understand this, then you are certainly part of the problem.

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Consent and consequences

How one person's choice resulted in my leaving MIT

By Anonymous

"But you like Sarah."

Behind us was a mostly-deserted Tavern in the Square, where empty seats outnumbered patrons. An exhausted bar staff was anxious to go home after spending all night softening customers' worries with liquids. Alcohol is one of the puzzling poisons of our culture — we bring to it such a myriad of emotions: success, trouble, boredom, friendship, and sadness. Tonight, the emotion of choice was friendship. Though Derek and I had only know each other for a few hours, we had an almost instantaneous feeling of intimacy and trust — the kind you get after quickly finding many things in common with another person. I felt, strangely, like we had been friends for years. Aided by multiple drinks, we had spilled the secrets of our personalities. I was genuinely excited about this new, intelligent friend, who seemed to understand me in a place where I didn't quite fit in.

I distinctly remember thinking that all I wanted, even in my intoxicated state, was to be friends. Derek had showed no interest in me romantically during the evening. Instead, he had spent a good portion of our time talking about how he had just started dating another graduate student, Sarah. I was thrilled for him. Sarah was an incredibly brilliant and kind person, one of those genuine, universally-liked human beings.

So when Derek kept buying me drinks after I said I already had enough, I thought nothing of it. Anyone could see how smitten he was with Sarah. Why think otherwise?

"But you like Sarah."

It started raining, and I could barely walk. My veins flowed with alcohol consumed under the pretense of strangers becoming friends. We had chatted over drinks on topics ranging from the signal processing properties of the Bose speakers in the Muddy Charles to the weekly fashion show at the Liberty Hotel. After leaving the second bar of the night, we cheerfully stum-

bled down Mass Ave as he walked me back to my dorm.

But then, quickly and completely unexpectedly, he began persuading me to go back to his place.

Even in my hazed state, I was dumbfounded by this advance. We had just finished talking about his newly-formed relationship with Sarah. She even lived in the same dorm as I did. He could easily walk me home and then collapse into bed with her. What possible motivation could he have for taking me home with him?

"But *you* like Sarah."

I repeated this phrase over and over again, not understanding why his obviously brilliant mind could not grasp this very simple concept. All the while, a Taylor Swift lyric about how he had "a girl at home" kept swimming around in my head.

"But you like Sarah."

How often does one attempting to cheat get reminded multiple times that he likes another girl? Not a mutual, clandestine agreement to do something "we really shouldn't" but this blunt phrase that I kept saying over and over — that he already had someone else.

I don't know how we ended up back at his apartment. On the way there, he said, "I haven't had sex in a week." That phrase really struck me as odd, especially since I had never mentioned, much less committed to, sex. But my brain was drowning in alcohol, and I could barely stand.

Yes, on the way back to his place, we kissed. I don't remember who kissed whom, but I know that I did not initiate going home with him. Who wants to go home with a guy who spent half the evening talking about his infatuation with another girl? When we finally reached his place, I fell onto his bed, and we began kissing, a level of contact I was comfortable with.

But then he yanked off my jeans and forced himself inside of me as I said no.

Everything after that was hazy. All my brain could think was,"Well I guess that's

it. My virginity is gone." The culture I grew up in drew a razor sharp line between the pure virgins and the sexually immoral. I was raised on stories about how those who lose their virginity before marriage are less than whole. But no one had taught me how to react when it was stolen from you.

Before I left the next morning, Derek had me shower, to wash away any evidence, I guess. After the alcohol started to wear off and reason came back into my head, I went straight to MIT Medical and got Plan B — Derek hadn't thought it was necessary to use protection. It's a special type of monster who rapes a girl without a condom, leaving her to deal with the possibility of pregnancy or an STD.

They asked if it was consensual. I said yes because I didn't know what consent was. I thought you had to be held down — biting, kicking and screaming — to be raped. I thought I had, in some twisted way, given consent, since I didn't fight or run away. Only later did I find out that in the state of Massachusetts, you cannot give consent if you are so intoxicated you can't stand up. Even if I hadn't said no, this encounter still would not have been consensual.

But I *had* said no. And still someone took something that wasn't theirs.

Some people think, in a case like this, the girl claims rape because she regrets it. Let me be very clear: I have gone home with guys that I regretted. But the simple fact is, with those guys, I had a choice. They asked for consent. In this case, a choice was made for me, yanked from me.

Some of you reading this might say, "It's your own fault for getting drunk." Would you say the same thing if Derek had murdered me? Why is rape a crime where we try to split equal blame between the victim and the criminal? You might counter, "But he was drunk too." Well, if alcohol causes you to rape someone, to have sex with someone without their consent — don't fucking drink.

I spiraled after that night. How else was I supposed to react? I got raped at 24, and

my virginity was snatched from me. Some people never recover from something like that. But I had to try to continue grad school at one of the toughest universities in the world, while the guy who raped me worked one floor above me. I went from getting an A in my advisor's class one semester to getting a "gentleman's B" the next. I couldn't think, couldn't function, could barely get out of bed, and was depressed all summer. And the worst part is, I suffered on my own and didn't say anything. I have a close, personal relationship with Derek's research advisor, and Derek was his favorite student. I thought if I said something, Derek would get kicked out, and the professor I adored so much would hate me. So I fell apart and eventually had to take a leave of absence with no Masters or PhD.

Derek graduated a couple of years later with a PhD and married Sarah.

Somehow, with therapy and an incredible amount of strength, I pulled myself out of the hole that Derek shoved me into. Now I have an unbelievably amazing job, an incredible boyfriend, and a renewed passion for my field. I managed to crawl out of a dark place that some people never get to leave. And I'm happy. Well, sort of. In addition to my virginity, I lost my dream of completing a PhD at a top-tier university ... all because someone hadn't "had sex in a week."

This experience made me feel so powerless. I found myself getting unreasonably upset with other situations in my life where I felt helpless and mistreated. Then, I wrote this story, and I found that there is power in telling the truth. I'm hoping that maybe someone reading this will do what I didn't and say something. Maybe sharing my nightmare will allow someone to reach out, ask for help, and, instead of leaving, get to finish their education at MIT. Or, at the very least, maybe it will just help someone feel like they aren't alone.

Editor's Note: all names of people associated with this article have been changed to protect identities.

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Ev Baker (1901-1950)

Father, friend, and mentor as remembered by his sons

By David Baker and Sidney Baker

Dave Baker

How do we remember someone? For those who did not know Ev Baker, MIT's Dean of Students from 1947 to Aug. 1950, it may be simply that a building bears his name or a picture hangs on a wall.

For almost 70 years, a portrait of Dean Baker has greeted residents and guests as they enter Baker House. Although most of his contemporaries are long-since gone, I believe that many would have said the photograph, although a good likeness, did not represent the man that they knew and loved. A new portrait, painted by Ester Lovett in 1952, two years after his death, has now replaced the more formal picture.

The purpose of this essay is to share some memories of my father with hope that these memories will give the new portrait more meaning.

My father was a multi-generational man, comfortable with a five-year old and a Prime Minister. I was five years old when my father introduced me to the natural world. We climbed Mt. Chocorua in New Hampshire, an easy hike for an adult but a challenge for a five-year-old. Dad understood that the day had to be an adventure, not a climb. We explored the softness of mosses, the lacy beauty of a fern, the smoothness of stones in a stream bed, the critters that lived under every rock, and the roughness of the granite rocks at the summit. That experience was the beginning of my love affair with the mountains.

As a camp counselor, Dad introduced hundreds of boys at camps in New Hampshire and Maine to canoeing, archery, and backpacking. We learned that, even when wet, birch bark can be used to start a warming campfire on a cold and rainy day.

We learned that everyone you meet on a trail in the White Mountains of New Hampshire was a friend. Dad's warm greeting always elicited a response and often a conversation. I thought that my father must know everyone in the world.

In my teen years, Dad arranged visits to a steel mill, a factory that converted a white-hot steel ingot into reels of wire cable, and the Cleveland Plain Dealer. I learned that men had to work hard in difficult and dangerous jobs. He was instrumental in providing homes and jobs for the Nisei being relocated from western states' internment camps and invited them to hold Buddhist services in his church.

When he became Dean of Students at MIT, he immersed himself not only in the life of the students, but also in the science. He was a curious man, and his curiosity gave him a perspective about life that was unusual at the time. He learned and shared with me how paper was made, how a Van de Graaff generator worked, and the photography of Harold Edgerton. In 1949, he told me that he wanted to show me something that would "change the world." We visited the Whirlwind II computer, housed in a twostory mechanical engineering lab converted into a computer room. He was prescient in his recognition of the role that computers would play in the future.

He also actively collaborated with Alvar Aalto during the design and construction of what was initially called Senior House. He spent hours at the job site suggesting changes that would make the building more welcoming.

Ev Baker did not take himself too seriously. He had a sense of humor and often told stories of when he was humbled by his experience. I recall standing next to him after a Sunday service in a small summer community on the New Hampshire coast. A "proper Bostonian lady" (she had a hat and white gloves) stopped to tell him how much she had enjoyed his sermon and also the same sermon the week before at another town and then again, the week before in Holderness, NH. He could tell that story and laugh about it.

In Cleveland, he did not avoid delivering sermons on sensitive subjects from the pulpit. The series entitled *If I were a Negro, If I were a Jew*, and *If I were a Catholic* elicited heated debate within his congregation and in the larger community.

Ev Baker taught me and many others many lessons, lessons that were to serve us well as adults. Among them: always leave the campsite in better shape than when you found it; it is not how little you carry in your pack, but how much; on a steep climb, small steps are better than big ones; and last, be willing to take risks, but don't tell your mother.

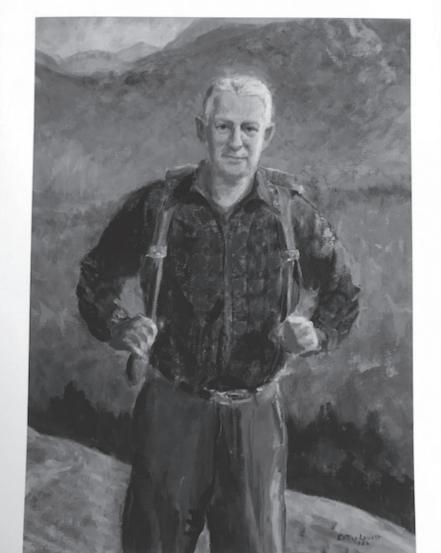
One of Dean Baker's colleagues, Tom Sherwood, Dean of Engineering wrote: "Those whose life he touched gained something which they will not lose. Our thoughts, decisions, and actions will continue to be influenced for good, often unconsciously, by the better standards of living with people which we gained through our contacts with him. The perception that this is so gives both an intelligent and beautiful meaning to 'life after death.' There is something of Everett Baker in the character of each of us who knew him."

Dr. Karl Compton, Chairman of the MIT Corporation, wrote: "He was a rare combination of spiritual leader and personal friend. Though his time with us was tragically cut short, his influence on the character of this Institution and the lives of its students will always be with us."

The portrait that now welcomes residents and guests in Baker House captures the essence of Ev Baker. He loved life, he loved the mountains, and he loved people — all people. His life's journey was cut short, but his lessons, his wisdom, his thoughtfulness, his kindness, and his understanding made a difference. May they continue to do so.

Sid Baker

"That's the last time I will ever see my Dad." These words, scarcely thought, barely spoken, and hardly heard brought a twosecond pause before Sandy said, "Your serve." He and I had been volleying badminton, awaiting my Dad's stop for a goodbye hug as he headed for a trip such as had been regular during the three years since he became Dean of Students at MIT. Camp was over, and my mom and I returned home to Wellesley the following week. A few days remained before my Dad's scheduled return from chairing a conference in Bombay (now Mumbai), India, where he presented MIT's contribution to a discussion of international students in graduate education in American universities. I heard the phone ring in my mother's bedroom shortly after dawn. It was a reporter from the Boston Herald who awakened her seeking a statement on the



DAVID BAKER—THE TECH

This portrait of Everett Baker, painted in 1952 by Ester Lovett, now hangs in Baker House

news of Dean Baker's death in a TWA plane crash in Egypt.

A blindsided trauma is dramatically more injurious than one that comes with an antecedent "look out" on a ski slope or a sudden turn of fate. Never in my life has such a tiny signal been productive of such a huge impact as was given me by my premonition: like an enzymatic transformation of crippling sorrow into activation of muscular intention. The warning attenuated my grief and fashioned a perception that my father's spirit was alive within me.

How did MIT's vast institutional soul confront the unprepared loss of just one fairly recent member of its organization especially one who was a Dartmouth graduate with a Harvard degree in divinity — as minute and foreign to its culture as was my premonition to my psyche? What had my father done, or what had he been during his brief tenure, that cultivated a gesture so generous as giving his name to MIT's first dormitory? Was MIT's consciousness moved to acknowledge changes Everett Baker had evoked in its institutional spirit? Analogy suggests that the vector may have been love. Yes, but that explanation fails to identify a feature of MIT's psyche that was darkened by World War II. Perhaps it was more a matter of nudging MIT's spirit out of its wartime funk by helping to revive a funny cencibility that nati

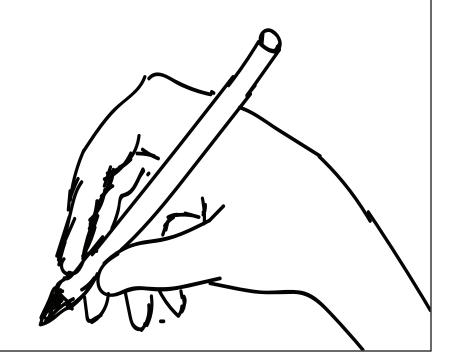
habits the world of subatomic particles, subtle forces, astronomical anomalies and premonitions.

As I understand the history, the mission my dad was given had to do with the humanization of MIT's ethos. Ev Baker was, indeed a humanist. He was not a jokester, but he had a robust appreciation for humor as celebrated with the founding of Techs-a-Poppin in the year of his arrival. (https://tinyurl.com/bakerpoppin). Going back seven decades in my memory, the MIT students brought laughter to our dining table. I recall one trip to New Hampshire when we dropped off a fledgling MIT student comedian to make his way through the summer resorts in exchange for laughter. Among the gifts for which my Dad was honored in the naming of Baker House, one must have been the animation of MIT's sense of humor.

The portrait of Everett Baker that has welcomed visitors to Baker house has always seemed to my brother and me to reveal an unfamiliar side of him with its stiffly formal presentation. What he brought to MIT was, we believe, much more a spirit that was alive in his love of hiking mountain trails. We are delighted to have the portrait painted by a woman we called Aunt Esther, wife of my namesake Uncle Sid, chaplain of Yale for the many decades of his close friendship with my father.

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SCIENCE FEATURE

Fluid intelligence

The field of artificial intelligence (AI) is broad and evolving

By Tu-Lan Vu-Han STAFF WRITER

Many consider the summer of 1956 to be the birthdate of artificial intelligence (AI) as a research field. A group of researchers, including Marvin Minsky, John McCarthy, Nathaniel Rochester, and Claude Shannon, attended a workshop that, according to their proposal in 1955, aimed "to find how to make machines use language, form abstractions and concepts, solve kinds of problems now reserved for humans, and improve themselves."

The field has since evolved rapidly, though the definition of AI remains fluid.

"The meaning of AI is still very much under debate, and I am not sure there is consensus on what does and doesn't constitute AI. If I were to attempt to describe it, I would say that a system is artificially intelligent if it can learn to react to new situations from experience and acts in a way which is consistent with how humans judge intelligence," Zelda Mariet, a PhD candidate in Suvrit Sra's group at Laboratory for Information and Decision Systems (LIDS) and Computer Science and Artificial Intelligence Laboratory (CSAIL) explained.

"AI is a very broad area, as humans demonstrate intelligence in many aspects," Yen-Ling Kuo, PhD candidate in Boris Katz's group at CSAIL pointed out. Quoting Marvin Minsky's book The Emotion Machine, Kuo called it a "suitcase" word: "They contain many smaller concepts that can be unpacked and analyzed." The many aspects and concepts in AI are found in the vast and rapid expansion of the research field into multiple disciplines.

"To me, the term AI comprises philosophical aspects and the discussion about (human) intelligence as a whole, which is why the term 'machine learning' is a more precise description of my research," Mariet said. She elaborated further, "Machine learning, in a sense, is closer to the engineering that people think of when they talk about AI: creating, improving upon, and understanding the statistical properties of the models used to leverage patterns from data."

Kuo mentioned the range of forms an AI can take: "An agent can be a robot in the physical world to assist people or a virtual email agent that reads your emails to generate auto-replies," she said.

Kuo's research focuses on machines' planning of motions and actions to achieve specific tasks and goals, like reaching to pick up an object. "I am working on algorithms that enable agents to plan faster using their visual perceptions and past experience, and enable robots to follow commands like 'pick up the box at the corner." For her studies, she uses supervised learning algorithms with data collected from simulations where she can define criteria for success. "Since plans and actions are sequences of movements, I use hidden Markov models ... to learn and decode an action sequence, which can be formulated as neural network models," Kuo explained.

There are numerous machine learning algorithms, and they can be divided into three groups: supervised, unsupervised and reinforcement learning. Each group has many subgroups, and the algorithms can be optimized and applied in different

Kuo noted the need for comprehensive data collection to train the models: "To scale up to more actions and more environments, we will need datasets that cover examples in those scenarios." Accounting for such a vast variety of scenarios would require tens of thousands of examples.

In order to do that, Kuo mostly uses probabilistic models in machine learning. According to Kuo, these models can better deal with uncertainty. The goal is to compensate for unobservable variables and future events as well as handling sensor or perception errors.

Mariet studies machine learning model designs, a more theoretical approach to machine learning. "I work on creating and improving models that, after observing a finite number of solutions to a specific problem, 'learn' to solve the problem on new data," she explained. Neural networks are a very popular and widely used model class for machine learning, but the number or parameters within a neural network can be too vast to handle or store. The GoogleNet network has roughly 11 million parameters, according to Mariet.

"One option is to set almost all parameters to zero, and only keep a very small fraction to their initial values," Mariet explained. This method is called subset selection. How does one select these parameters to reflect the quality and diversity of the original features and still perform well on new data? "There are a lot of problems in machine learning that can be seen as particular cases of subset selection."

"For example, a model is provided with 100,000 images of cats and dogs, and from those images learns to distinguish any cat from any dog," Mariet explained. These images can come in many complex variants: "What if the model sees many more cats than dogs, or if the images are blurry, or if some adversary gets to choose 50 images and lie, saying it's a picture of a cast instead of a dog?" Mariet said.

In her work, Mariet performs probability measures over subsets of a ground set (e.g. determinantal point processes) to analyze machine learning model design.

Her work mostly involves mathematics and optimization. "Since I work on the theoretical side, I am mostly interested in obtaining provable results about the models I play with, although I do run experiments to make sure the practice aligns with the theory," Mariet said.

Another example of applied machine learning is the work of Hsin-Yu Lai, a Electrical Engineering and Computer Science (EECS) PhD student working in the Energy-Efficient Multimedia Systems Group and Integrative Neuromonitoring (EEMS) and Critical Care Informatics Group (INCCI) with Thomas Heldt and Vivienne Sze. Lai uses machine learning to track changes in eye movement patterns that may correlate with neurological diseases, such as Alzheimer's disease. "We use computer vision algorithms to acquire the eye movement patterns," Lai said and listed face detection and neuralnetwork-based eye-tracking algorithms that she works with.

"Current methods to track disease progression are variable and invasive. By using mobile platforms to quantify the changes in the eye movement patterns, we can develop a tool that can be personalized and less invasive," Lai explained. Her research is aimed at applying machine learning for diagnostic purposes in the medical field.

Finally, Mariet pointed out, "One thing I think is important to consider no matter what you are doing in machine learning...is that the data we have access to is not necessarily representative of the data that the model will have to work with 'in the wild." Once the system is deployed, it will encounter a much greater and more diverse range of data, according to Mariet. "So, it is vital to make sure that the model works just as well on this data."

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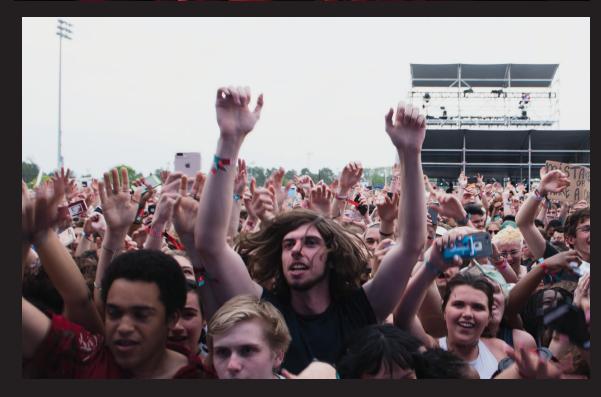
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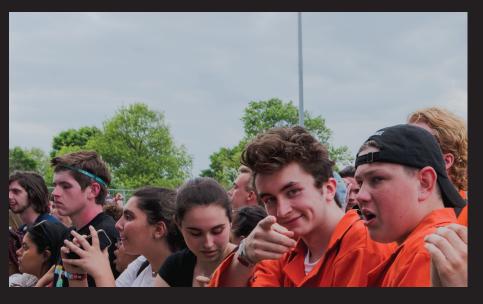




BOSTON CALLED

The ninth Boston Calling music festival took place May 25–27, 2018 at the Harvard Athletic Complex. It was headlined by Eminem, The Killers, and Jack White, and included performances by Queens of the Stone Age, The National, Paramore, Tyler, the Creator, Khalid, Portugal. The Man, St. Vincent, and many others. Take a close-up look at the performers and the audience at the festival through the lens of *The Tech*.

8, 2018 The Tech 11















- "Sandberg, the **architect of the business model** that is now the subject of so much scrutiny, **has remained silent**...to protect her personal brand."
 - Olivia Solon, The Guardian MARCH 29, 2018

But former **Facebook technologists are speaking out.** Here's what they're saying about the corporation they helped to build:

- "I think we have created tools that are **ripping apart the social fabric** of how society works."
- Chamath Palihapitiya, Vice President for User Growth
- "Data is the common wealth that we're all creating for the future century, and we shouldn't tie our economic outcomes to it so **only a few people** are getting extremely wealthy."
- Chris Hughes, Facebook Co-Founder
- "God only knows what it's doing to **our children's brains."**
- Sean Parker, Founding President
- "I decided to leave Facebook because I saw ahead of me, by Zuckerberg's and Sandberg's own hands, an **unending race of pure ambition,** where no amount of money or power is enough."
- Katherine Losse, Employee 51

- "You don't make anyone's life better by making advertisements work better."
- Jan Koum, WhatsApp Co-Founder
- "If we only care about profit maximization, we will **go rapidly into dystopia."**
- Justin Rosenstein, Engineer
- "Facebook is kind of like, 'Well, the algorithm says to feed you just endless sugar and fat, right, and that's what we're going to do."
- Antonio García-Martínez, Product Manager
- "Facebook is a **fundamentally addictive product** that is designed to capture as much of your attention as possible without any regard for the consequences."
- Sandy Parakilas, Operations Manager
- "It is time. #deletefacebook."
- Brian Acton, WhatsApp Co-Founder

The business model Sheryl Sandberg designed for Facebook is breaking democracy. **It's time to break up Facebook.**

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'We'll walk this road together, through the storm / Whatever weather, cold or warm'

The Killers, Jack White, and Eminem headline Boston Calling 2018

By Ivy Li and Mahi Shafiullah

"You are our people," a sign reads. Boston Calling invites Boston and Cambridge to join a weekend music celebration with incredible headliners each night and numerous performing artists throughout the day. Three stages (Blue, Red, Green), food vendors, a giant Ferris wheel, and an indoor entertainment arena opened up this year's Boston Calling experience. Improved from last year are an increased number of food options, providing a more comprehensive experience of what Boston's local businesses have to offer.

The setup upon entering the main part of the Athletic Complex was (from left to right): various audio company booths, food stands, a ferris wheel, the Red Stage, the main Green Stage, and more food stands. Over-21s would find alcohol easily available, with a Samuel Adams booth, drink stands of water, wine, and beer, and set up bars in tents.

Blue skies and warm weather on Friday ensured that Day One of 2018's Boston Calling Music Festival was fantastic. Some highlights include Pussy Riot, The National, Citizen, and Portugal. The Man. Paramore's Hayley Williams was a fantastic performer, wowing audiences as expected.

As we neared 9 p.m., the main stage began its setup, and a crowd formed in anticipation of Friday's headliner, The Killers. In a surprise turn of events, Brandon Flowers performed the party-favorite "Mr. Brightside"in an exuberant fervor, starting the night off strong. Running through their 2000s hits such as "Human" (the enchanting chorus line, "Are we human? Or are we dancer?" was sung by the crowd). The sheer enthusiasm and grin that Flowers had during the performance made his love of performance clear.

The crowd's fans sang along, keeping the energy up the rest of the performance, even after The Killers went through their top hits. Flowers even invited an audience member to play drums with them for one song as they performed, to the jealousy of numerous fans. When the song ended, the audience member took a selfie and embraced Flowers, which the audience greeted with applause and approval. With dramatic lighting, expressive projections on the back of the stage and confetti flying through the air, it was a fantastic end to a fantastic first day.

Alt rock dominated Day Two at Boston Calling, headlined by Jack White, and made amazing by St. Vincent and Tyler, the Creator. Listening to St. Vincent live is definitely a treat, but even better is watching her perform — she presented herself as a character almost out of a comic book or video game. Her backup vocalist, Toko Yasuda, shone in her own right. Tyler, the Creator brought his multi-flavored hip-hop to full enjoyment of the audience, and encouraged his fans to appreciate his art regardless of the flavor they prefer. The performance by Jack White was good as well, but the break-up of the White Stripes was felt dearly by the audience.

The beautiful weather did not hold out long. In typical Boston fashion, Day Three was sullied with rain, wind, and 55-degree weather. But this did not prevent hip hop and rap fans from coming out for that day's indie bands and rap artists. I had the chance to see Taylor Bennett and Mike D, who both impressed me with their vastly different styles. While festival-goers lined up at Soundscape for free ponchos, artists were performing at different stages. Other highlights include Fleet Foxes and The Decemberists at the Blue Stage.

But in anticipation of the ever popular Eminem, the bustling sea of people swallowed me up as fans pushed through to be as close to the stage as possible. "We are Stan!" shouted a bunch of the more enthusiastic fans. In red trainers, Eminem leapt. strutted, and rapped across the stage as the cityscape projected behind him morphed,

Boston Calling 2018 Harvard Athletic Complex May 25 - 27

from sunsets to burning hell to city lights at night; the performance was a number of his hit songs flowing from one to the next. It was so effortlessly done that I was impressed by the repertoire, from Skylar Grey's guest entrance for a third of the song "Stan" to other old hits such as "White America" and "The Way I Am." Numerous classics from the early 2000s have kept him more than just afloat: they fuel the energy of his fans and closed off the weekend with one of the most energetic sing-alongs I've ever been a part of.

During the performance, to address the Nicki Minaj rumors, Eminem asked the crowd if they want him to date her. Cue the cheers. He then said, to the delight of the crowd, "Nicki, if you get this message, just text me later, we'll talk about it." Cue another eruption of cheers. The banter between Eminem and Mr. Porter was lighthearted and fun, and it was clear that, like The Killers and Jack White, all three headliners brought excitement back through the crowd.

MUSIC FESTIVAL REVIEW

A story of stories

Post Malone, Jack White, Halsey, Khalid, and Eminem at Governors Ball 2018: What more could you want?

Governors Ball 2018

Randall Island Park, **New York**

June 1 – 3

By Mahi Shafiullah

STAFF WRITER

Even before you enter Randall's Island Park, from the bridges entering the island, you will see the giant arcs in the sky, made of balloons. Three of them, in fact: one red and two blue. They are parts of an art installation that dominated the sky the whole time in Governors Ball. In one way, this installation was also a symbol of Governors Ball itself a symbol of the sky-high ambition of putting together a list of musical stars together that deserves a nod for the sheer audacity of it. The way Governors Ball pulled it off over the weekend of June 1 to 3 is simply gorgeous.

The weather over three days were as different as heaven and earth — the festival

went through a rainy Saturday, and ended on a chilly Sunday. Woe thus befell those who did not check their weather app before coming to the festival. Even then, the crowd did not look like it gave the weather a second thought and grew steadily as the weekend went on.

Besides music, the festival also offered local food and wine to the attendees, although the awkward shape of the grounds did not offer itself to a nice arrangement to the stalls. Perhaps more attention in these parts were due, since it felt like only a half-hearted attempt was made to ensure an enjoyable experience in this aspect. Even then, the crowd was not shy in finding their sustenance, or something more, when they needed it.

The highlight of Day One definitely started with Shawn Mendes. The large number of teenagers cheering him on was proof of his popularity, and he did deliver what they came for with a few of his most popular numbers. Then came Post Malone, who definitely would have won any award for performing well while intoxicated, if any a mark in the heart of the audience when started off with sweltering heat on Friday, he prefaced almost all of his songs with hits with backup dancers on stage. N.E.R.D

a small story from his life. And despite his state, Malone did care for his fans and even stopped his song when someone collapsed in the crowd to ensure that they were safe. That night, Jack White was the headline performer, but his performance was quite small and cozy, with mostly his avid fans present.

The next day, the big names started with 2 Chainz rapping in the late afternoon. The day felt like it was highlighting rap music, as it was headlined by Travis Scott. He mesmerized the crowd with numbers like "Antidote," "Butterfly Effect," and "Goosebumps." In the middle, though, all the spotlights were on Halsey as she performed in a dazzling yet down-to-earth way. Her story about signing her first deal four years ago on the same day, and then coming to Governors Ball and standing in the crowd in the back truly touched hearts. Diplo and Mark Ronson's new collaboration, Silk City, was also quite good, although at the beginning. it was hard for them to create a club envi-

ronment under the sun, On the final day, the main highlights ere Khalid, Pharrell Williams's N.E.R.D. such thing existed. But his performance left and of course, Eminem. Khalid was his these festivals are so popular: because they usual buoyant self, performing his recent tell us to carry on, and because they show us

rocked out the audience effortlessly, moving them with their beats while Pharrell was losing his voice. The cherry on the top of this amazing festival was Eminem. The huge number of attendees to his concert despite the chilly weather attests to his fame even now. In his performance, the Rap God was unparalleled. From the very beginning, the crowd started singing along with his songs, and as he closed with "Lose Yourself," it felt like the whole grounds came alive with voices drowning out the deafening sound systems that dominated the whole weekend.

Among the relatively young and new performers, Aurora and Billie Eilish were eye-catching. They are definitely artists music fans should keep an eye out for.

A recurring theme in the festival was how the live performers were live. They might be superstars, but they are live people just like the audience, with stories behind their success. From Post Malone to Halsey to Khalid, every young performer repeated the same tale: be your own self, and keep chasing your dreams. Perhans that's why people's dreams truly have no end.

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VIDEO GAME REVIEW

Apocalyptic snakes and warring animal clans

Omensight beautifully focuses on a world on the brink of death but not willing to go down without a fight



The Harbinger and Ratika race through the Crimson Forest in order to solve the mystery of the world's end.

By Nathan Liang

Omensight takes place in the kingdom of Urralia, torn by a war between the imperial powers of Lord Indrik and his accompanying bird, cat, and dog clans and the rebel forces of Ratika and her rallied rat and bear clans. During this conflict, the Godless Priestess, Vera, is murdered, which only works to flame the fires on both sides of the conflict.

Then, to make matters worst, legend has it that when the world is nearing its final demise, the Harbinger will appear and prevent its end. In Omensight, you play as this supernatural last resort. The death of the Godless Priestess means the loss of the only power keeping back the dark forces of the Void, and when you're thrown into the game, the Void incarnate, Volden, has already been summoned to devour the world.

So if the world already ends at the beginning of the game, how are you supposed to save it? Meet one of the most crucial gameplay mechanics in *Omensight*: the ability to travel back in time. There's just one caveat: you must first establish a connection with a character companion's soul, and your travel is restricted to their last living day. Upon the first demise of the world, you're called to the Tree of Life by the Witch, a timeless, supernatural force who seeks to guide you, the Harbinger, as you figure out the mystery behind the Godless Priestess's death. By using the Tree of Life's power , you can travel back to the dawn of the last day as that character's companion to discover as much as you can about how that character plays a part in the end of the world.

Speaking of companion characters, the developers do a good job in making each of the four main characters come to life with very distinct personalities and amazing voice actors to boot! At the start, you're given the opportunity to travel back in time

with either the lawfully good General Draga or the drunken, always-angry Ludomir. Later, you're also given the chance to accompany the strict, merciless ruler Lord Indrik and the chatterbox, rebel leader Ratika on their last days before the end. The more you play through the game, the more you learn to rely on certain characters to discover certain things about the murder mystery at hand. For example, no matter what, I almost always went to General Draga as an initial companion through the beginning of each chapter because she was a reliable character who could clearly guide you to the next point of interest.

The developers of *Omensight* also did a remarkable job in the writing of the story. The plot twists were not easily predictable, and nor was figuring out where each character stood on the moral spectrum. Each of the four main characters you interact with are purposefully written so that you can't ever really point the blame at any one of them, with the exception of General Draga, until the last act of the game.

Some other things worth mentioning are the soundtrack of Omensight, as it always works to complement the game's scenarios while absorbing the player into the game's settings, and the level design, as each level takes on a new meaning with each companion character.

Now, for some setbacks of the game. The combat, while fun and very fluid in its execution, would at times be more challenging than expected, usually because there was a limiting factor placed that would affect battle dynamics. For example, with each companion character, you're given a special attack to use specific to each character — unless you're using Lord Indrik. Since he is the emperor of Urralia after all, of course he would take commands from no one, not even the Harbinger. And, all things considered, when you're being flooded by 15 dredge

★★★★☆ Omensight Developed by Spearhead Games Published by Spearhead Games Rated T for Teen Available on PS4 and

Windows

(creatures of the Void) and counting, it gets pretty annoying when Lord Indrik refuses to use his shiny fireball powers to help you out when you specifically need it.

Also, even though the story overall is pretty well-written, there are still some minor things that are either never explained clearly or just plain confusing when you're first exposed to them. One of the most glaring examples of this is the change of heart Lord Indrik undergoes at some point in the story. As part of the game, you can collect memories that shed insight into the backstory of each character important to the story, so you can begin forming your own ideas of the kind of animal they are. But then, something happens like the aforementioned Lord Indrik situation that seems to completely go against his established character. While it is convenient for the story, it confuses any player who was invested into learning about each character arc and makes things seem less sincere.

Overall, despite its few flaws, Omensight is an excellent, intriguing, and worthwhile game to pick up for fans of the fantasy and murder mystery genre alike.

PIZZA COLUMN

Figuring out fancy pizza

Figs serves upscale rectangular pies in Beacon Hill

Figs Pizza, \$\$ 42 Charles St. Boston, MA 02114 Monday - Saturday 11:30 a.m. -10 p.m. Sunday 12-10 p.m.

By Hannah Rudoltz

SENIOR EDITOR

When I told Vivian that the next Boston pizza I wanted to eat was at Figs, her response was: "ooh [F]igs is fancy!" Figs is a pizzeria that does not want to be seen as just the local neighborhood pizza shop; it wants to be different, even in the shapes of its pies. The restaurant's motto is "Never Trust a Round Pizza," and the thin crust pies here come in rectangles sliced in half longways, then four times across to make the standard eight slices in a non-standard shape.

I'm no newcomer to Figs's pizza. The first time I ate it was about five years ago in the form of someone else's cold leftovers (I love cold pizza! What can I say?). I thought it was great. The two times I went there during my freshman year, almost four years ago now, I also thought the pizza was very good, but I didn't go in with a real focus on the pizza's quality.

I did notice the ambiance when I went on a date there a few years ago. Especially at night, the restaurant is dim, candlelit, very cosy and romantic: definitely a great place to bring a date. The downside to that cosiness is that, in the Beacon Hill location, you sometimes cannot even move your chair (I have also been to the Charlestown location, which is more spacious). We had to shimmy in and out of our seats, even at a late 2 p.m. lunch.

One of the great things about Figs is that you can order a half-and-half pizza, which might not be an option at similarly highend pizza restaurants. Given the restaurant's name, Vivian and I had to order at least half of the Fig and Prosciutto pizza (\$25), with a fig and balsamic jam,gorgonzola, prosciutto and fig pieces. The other half of the pizza was Quattro Formaggio (\$22), with tomato sauce, basil oil, mozzarella, provolone, fontina, and herbed ricotta. We also ordered a Rustic Caesar Salad to start.

The waiter brought out pieces of focaccia d a small dish of olive oil with a few oliv in it. The bread at Figs is great. It's basically really good pizza dough - dense, soft and flavorful — that's been baked perfectly. Not to say too much about a salad in a pizza review, but the caesar salad was definitely one of the best I have had. The ratios of lettuce, dressing, cheese and croutons were perfect; it was not gloppy or heavy like Caesar salads have a tendency to be, and the flavors of the dressing and cheese together were spot on.

Figs's rectangular pizza is served on an inverted baking sheet; ours seemed to have the remains of some drippings from previous pizzas — but maybe that's trendy, who knows? The pizza has a very thin crust, and the toppings come very close to the edge of the slice, leaving very little exposed crust at the edge. The crust has very little flavor in itself, which makes sense given the complex flavor combinations that Figs typically adds to their pizzas.

The Quattro Formaggio side of the pizza looked very oily when it arrived. Four cheeses and basil oil on top of a very thin crust pizza leads to some difficult and messy pizza eating. The flavors of the pizza were pretty good, but with a sweet tomato sauce and nothing acidic on the pizza, the slice as a whole was sweeter than I typically like. Every now and then, a bite



A half quattro formaggio, half fig and prosciutto pizza from Figs on Charles St. in

of garlic would cut through the sweetness — a welcome change. I actually really liked Figs's herbed ricotta on the Quattro Formaggio (unlike Ottos's, of whose herb mixture I have never been a fan). Still, given the sweetness and the extra oil, the pizza felt heavy.

Here's a pro-tip: when you have extra bread, and an extra-oily pizza (especially one covered in tasty basil oil), don't bother with any naive, calorie-saving paper towel grease blotting. Blot that grease with your bread for creative, classy eating at its finest.

As I do not eat meat, I relied on Vivian's assessment of the Fig and Prosciutto pie. The crust clearly held up better without both tomato sauce and oil on the pizza, and it did not bend so much or let toppings slide off as it was pulled off of the pan. Although she is not a huge fan of figs, she thought that the flavors of the pizza were spot on; at one point she said, "I took another bite, and it just surprised me!" For something that I could assess, the fig pizza was visually appealing, with the prosciutto nicely draped over the crust, its pink broken up artfully by the green sprigs of onion.

Figs had some of my favorite pizza in Boston when I first moved here, and my mildly disappointing experience with their Quattro Formaggio pizza does not really affect my affection for it. I remember the Bianco (topped with an arugula salad) and the Portobello (with mushrooms and truffle oil) as being nothing short of delicious. I would still recommend Figs for a more upscale, intimate pizza experience — just err on the side of the lighter, drier pizza toppings to complement Figs's thin crusts.

THE TECH 15 FRIDAY, JUNE 08, 2018



Deadpool (Ryan Reynolds) tries to appeal to Colossus (Stefan Kapicic) when he is in dire need of his aid.

★★★★☆ Deadpool 2 **Directed by David Leitch** Written by Rhett Reese, Paul Wernick, and Ryan Reynolds Starring Ryan Reynolds, Josh Brolin, Brianna Hildebrand, Julian

Dennison, and Zazie Beetz

By Nathan Liang

Deadpool's return to the big screen was what one would expect from the infamous anti-hero: foul-mouthed, action-packed, hilarious, and full of irrelevant references. Whether you've heard that the sequel is comparable, worse, or even better than the first, I still think the movie is worth a watch at least once in your lifetime.

Deadpool 2 tries to take a slightly different look at Deadpool (Ryan Reynolds) by humanizing him more than the first movie did. When he realizes the danger that faces a young mutant boy, Firefist (Julian Dennison), Deadpool tries his best to protect him from Cable (Josh Brolin), a time-traveling cyborg bent on getting revenge. In order to accomplish this, the anti-hero goes through a variety of shenanigans, including creating an X-Force by recruiting the likes of Domino (Zazie Beetz) and Shatterstar (Lewis Tan).

Unfortunately, it's a rather daunting task to try and compact all of Deadpool 2 in a meager review while also trying not to spoil anything major. I can see the man himself right now scoffing at my attempts while getting himself shot in the butt, though I suppose that's also indicative of the tune that the movie follows: Deadpool just winging it until he actually figures out the solution to his problem at hand.

Deadpool 2 also indulges itself by playing with classic movie cliches while not being a very cliche movie at its core. Deadpool just loves dabbling with the same themes that everyone is used to seeing while also making fun of them at the same time. He gets shot down and wants to try his hand at redemption? He could go the traditional route. Or he could do it while massacring a whole baddy base or revitalizing himself with a soft, fluffy bag of cocaine. He meets Firefist for the first time and tries to stop him from losing control of his powers by talking some sense into him? Sure, why not. But first, let's give Deadpool

a few good seconds of laughing his ass off at the poorly-chosen superhero name of "Firefist" first. As one might be able to tell, no good thing can be enjoyed in its pure form while Deadpool's around. Heck, even his death in the movie isn't conventional, as much as they make you think it will be.

Other things to note about the movie: it's probably more gory than the first Deadpool movie so all ye who be squeamish should be wary; you should probably catch up on any of Ryan Reynolds's old superhero movie roles before jumping headfirst into the bloody, murky waters of Deadpool 2; and expect an excellent soundtrack to be played at all the wrong times.

After this movie, I wouldn't be surprised to see more DeadpoolxColossus fanart tainting the world along with an increased number of Google searches of "What the fuck is dubstep?" Oh and also, as with any good Marvel movie, don't forget to stay until the very, very end of the credits! It'll be a good time.

MOVIE REVIEW

Rated R

Now Playing

A forgettable party

Melissa McCarthy's Life of the Party is an earnest effort, yet fails to be a memorable experience

*** Life of the Party **Directed by Ben Falcone** Written by Ben Falcone and Melissa McCarthy Starring Melissa McCarthy, Matt Walsh, Molly Gordon, Julia Bowen, and Debby Ryan Rated PG-13 **Now Playing**

By Muskaan Aggarwal

Life of the Party is the story of two middle-aged crises. The beginning is innocuous: Deanna (Melissa McCarthy) and Dan Miles (Matt Walsh) are dropping off their daughter Maddie (Molly Gordon) at their alma mater, Decatur University, for her senior vear of college. It's the stereotypical collegedrop off until Dan unceremoniously drops the bomb: he's fallen in love with another woman and wants a divorce. Deanna, reeling from both learning of Dan's infidelity and realizing personal sacrifices she made in her marriage, decides to go back to Decatur to finish the degree in Archaeology she had abandoned when she became pregnant with Maddie her senior year.

Melissa McCarthy shines in her roles as the sweet, homely mother, the overly excited,

non-traditional college student, and, eventually, the "life of the party." However, even she isn't enough to keep this movie afloat.

Foremost, Life of the Party lacks a suspenseful plot to keep the audience's attention. The entire premise of the movie is to catalogue Deanna's journey through college as a 40-something-year-old woman. Thus, the viewer is always aware of the ending: Deanna will assuredly graduate.

This lack of build-up could have been acceptable if her journey as a stay-at-home arent finally getting her degree had been interesting. But, the supporting characters lack gravitas, and the subplots are riddled with plot holes. When Deanna first tells Maddie of her decision to return to college, Maddie's reactions are somewhat muted. While the story line does attempt to showcase the evolution of Maddie's reactions from disbelief to jealousy and finally to acceptance, it seems as if in each subsequent frame, the character is hopping to the next emotion. There is no time to actually explore how a college student must actually feel to be in the same class as their parent. The other characters are simply unrelatable: there is Helen, the girl who was in a coma for eight years and somehow has three million twitter followers; Deanna and Maddie's two other friends that have no distinguishing characteristics; Deanna's agoraphobic roommate; and the two mean girls in her life, Marcie (Julia Bowen), Dan's new girlfriend, and Jennifer (Debby Ryan), a fellow-archaeology student who mocks Deanna's mom style and age.

All the supporting characters are largely one-dimensional, thus making for boring and somewhat unlikely sub-plots. One of the major sub-plots in the movie revolves around Deanna's relationship with Jack



Molly Gordon as Maddie and Melissa McCarthy as Deanna in New Line Cinema's comedy Life of the Party, a Warner Bros. Pictures release.

(Luke Benward), a Decatur frat boy. After a one-night stand at the first college party Deanna attends, Jack falls in love with her. The big kicker in this sub-plot is that Jack is Marcie's son. Again, a sub-plot that had potential is simply presented at the surface level. The other major sub-plot in the movie is a pitiable attempt to create some suspense: after unexpectedly getting high off of weed-laced chocolate, Deanna and her sorority sisters crash and trash Dan and Marcie's reception. As a result, Marcie and Dan decide to cut-off Deanna so that she cannot pay for her final semester of college. But then, Deanna's sorority sisters decide

to host an epic party to help Deanna pay for college. The party is lackluster until Leonor (Heidi Gardner), Deanna's reclusive roommate and also somehow Christina Aguilera's cousin, brings Aguilera to the party. Instead of focusing on making Deanna's journey more touching, this party seems unnecessary, stereotypical, and supremely unlikely.

The predictable storyline, the eccentric but unrelatable supporting characters, and superficial sub-plots make Life of the Party entirely missable despite McCarthy's earnest efforts, thus proving that even great actors need good scripts.

MOVIE REVIEW

Beauty is only skin deep in 'Solo'

Solo is beautifully shot, but disappoints by offering nothing beneath the surface.

Solo: A Stars War Story

Directed by Ron Howard

Written by Jonathan Kasdan, Lawrence Kasdan

Starring Alden Ehrenreich, Woody Harrelson, Emilia Clarke, **Donald Glover, Thandie** Newton

Rated PG-13

Now Playing

By Alex Sandberg

The new Star Wars films have, by and large, offered justification for their existence. The Force Awakens established a new lore, with both its strengths and weaknesses due to its similarity to A New Hope. The Last Jedi took Star Wars convention and turned it on its head while at the same time examining questions of purpose, doubt, and pain. Rogue One, personally my favorite of the new batch of movies, examined sacrifice and fighting for what you believe in, even in the face of futility.

I'm sorry to inform you that not only does Solo fail to justify its existence, it actively asserts reason after reason against its existence.

Telling Han Solo's story was always going to be a tricky endeavor. In some ways,



L3-L7 (Phoebe Waller-Bridge), Han Solo (Alden Ehrenreich), and Lando Calrissian (Donald Glover) hurtle through space in the familiar cockpit of the Millenium Falcon

Han's mysterious backstory was what made him interesting to us — we didn't need to know every detail; we just knew he was roguish, a masterful pilot, and at some point found himself with the Millennium Falcon and a wookie as his companion. We knew about the Kessel Run.

Solo feels its role is to answer all of these questions, along with questions we never asked. These answers are, by and large, disappointing. The dramatic beats are predictable; the deaths are unmotivated and feel either cheap or disinteresting. Either we don't care about the characters enough, or the deaths are out of narrative convenience.

Solo is not without its joys. As many other critics have noted, Donald Glover makes a wonderful Lando in one of the film's few convincing performances. The most egre-

giously bad character is L3, Lando's droid companion. The acting is fine, but the character's sole purpose in the movie is to mock feminism and other social justice movements, which actively detracts from the movie as a whole.

The one truly great thing about Solo is its cinematography. The shots are often wide, sweeping, and immaculately staged. The effects are gorgeous, and one scene in particular involving Marauders standing opposite the protagonists could be a painting. Bradford Young, the cinematographer, deserves acclaim for his work here, following after the beautiful Arrival. It is reminiscent, in some ways, of the cinematography of Rogue One, probably somewhat due to the same camera type being used on both. Solo is stunning, and that I will not argue

The problem is that aesthetics and nostalgia are all that Solo has. It has no message. It has dull plotting. Its characters are poorly written and given little to work with. Rather than standing alone, Solo's only merit is that it's yet another Star Wars flick, and it hopes that's enough for you.

Is Solo worth seeing? Maybe. If you're a Star Wars completionist, I'm sure you'll find something to like. The fights and the chases are fun, occasionally. But Solo is just not a good movie. It's mediocre at best and squanders any potential it may have had. It is, in my opinion, not worth wasting your money or time on (at nearly 2.5 hours, this film feels twice as long). Solo is a disappointment whose pleasures are few and far between. It is a truly bad Star Wars movie, but, more than that, it's also just a truly bad

THEATER REVIEW

Not in Kansas anymore

A reimagining of The Wizard of Oz that has soul bursting from the seams



Dorothy (Salome Smith), Tin Man (Steven Martin), and Scarecrow (Elle Borders) star in The Wiz.

By Ethan Vo and Johnson Huynh

ASSOCIATE ARTS EDITORS

Among adaptations of the L. Frank Baum's The Wonderful Wizard of Oz, The Wiz is notable for its depiction of African American culture and its appearance in popular culture through "Ease on Down the Road." While there are technical issues with Lyric Stage's production of The Wiz, the show features a cast of exceptionally talented actors who make the show a pleasant experience in the theater.

The Wiz takes the familiar plot of The

Wonderful Wizard of Oz and infuses it with elements of African American music and dance. Dorothy Gale, wanting a more exciting life than the one she currently has in Kansas, is suddenly swept away in a tornado into the magical land of Oz. Once there, she finds out that she has accidentally crushed the Wicked Witch of the East. Suddenly stuck in a foreign land, Dorothy seemingly has no way back home. All seems lost until the Good Witch of the North, Addaperle, tells her that the Wiz will be able to solve her problems. With nothing more than a yellow brick road to follow and a pair of silver slippers, Dorothy jauntily makes her way to

Regarding the performances of the cast, the actors convey great vitality in The Wiz's upbeat retelling of Baum's novel. While the main four friends are each funny and convincing in their own way, the standout performances come from Brandon Green as The Cowardly Lion and Davron Monroe as The Wiz. Both command the stage with great comedic presence, and as their characters reveal their true personalities, they give touching introspections into their

The Wiz Book by William F. Brown Music/Lyrics by Charlie **Smalls** Lyric Stage Boston May 18 - July 1

Musically, the production suffers from sound balance issues, which make it difficult for first-time listeners to comprehend the lyrics. Most of the actors' singing does not seem to be amplified, which causes the pit band to obscure the vocals. "The Feelg We Once Had" and "Ease on Down the Road" have noticeable occurrences of these problems, whereas scenes with The Wiz are much easier to follow along due to amplification of The Wiz's voice. The sound from the pit band also has a muffled quality that is unexpected from hearing live music. That said, however, there is exceptional singing from the cast, and Soneka Anderson delivers a thrilling rendition of "Home" that is alone well worth going to the show for to experience.

As for the overall style and presentation of the show, we were very intrigued with the flair that the set designer brought to the Lyric Stage. The stage, small as it was, was packed with detail and care. Upon closer inspection of the floor and steel drums on stage, one can notice that they are actually adorned with tribal and shamanistic symbols. Relying on African American iconography that honors rather than trivializes the cast's culture, the set is a lovely celebration of African American history.

Overall, The Wiz is a wonderfully unfaithful reimagining of L. Frank Baum's novel. Complete with showstopping tunes and gorgeous dance numbers, this performance is definitely one fairytale that shouldn't be left just to the kids.

UNFUNFUNFUNFUN FUNFUNFUNFUNFUNFUNFUNFUNFUNFUN UNFUNFUNFUNFUNFUN

Wraparounds by Gail Grabowski

Solution, page 9

ACROSS

- 1 Sgt.'s subordinates
- 5 Take illegally
- 10 Make a trade
- 14 Skin lotion ingredient
- 15 Barely detectable amount
- 16 Opera solo
- 17 Short-term worker, for short
- 18 Showed on TV
- 19 Teapot toppers
- 20 It encircles an athlete's forehead
- 22 Donkeys
- 23 Bagels and burger buns
- 24 Pesky flying insect
- 25 Being broadcast in the wee hours
- 28 Is caught in a downpour
- 31 Sulks
- 32 High-school dances
- 34 Pub beverage
- 35 Outer boundary
- 36 Popular fishes for sandwiches
- 37 Blend with a spoon
- 38 Pester persistently

- 39 Where a gold medalist finishes
- 40 Splinter groups
- 41 Paper-fastening device
- 43 Sound of a giggle
- 44 Feeling pleased
- 45 Wept
- 47 Frozen rain
- 49 It encircles a karate master
- 53 Greek pocket bread
- 54 Practical joke
- 55 Hardly __ (rarely)
- 56 Historical periods 57 Speedometer or odometer
- 58 T. Rex, for short
- 59 Hourly pay
- 60 Thing of value
- 61 Vending machine opening

- 1 Butter portions
- 2 Rode in a plane
- 3 __ in handy (be useful)
- 4 Pull apart
- 5 Farm building for horses 6 Courtroom event

- 7 Merits
- 8 Scored 100% on
- 9 Was in charge of
- 10 Spicy Mexican dips
- 11 It encircles the lower arm for timekeeping
- 12 Assistant
- 13 Football throw
- 21 Little kids
- 22 Picnic pests
- 24 Diamonds and rubies
- 25 Unlocks
- 26 Give a head signal to 27 It encircles a suitcase

handle

- 28 "Nanny" animal
- 29 High-society group 30 Brief in one's words
- 32 Contented cat's sound
- 33 Hospital colleagues of

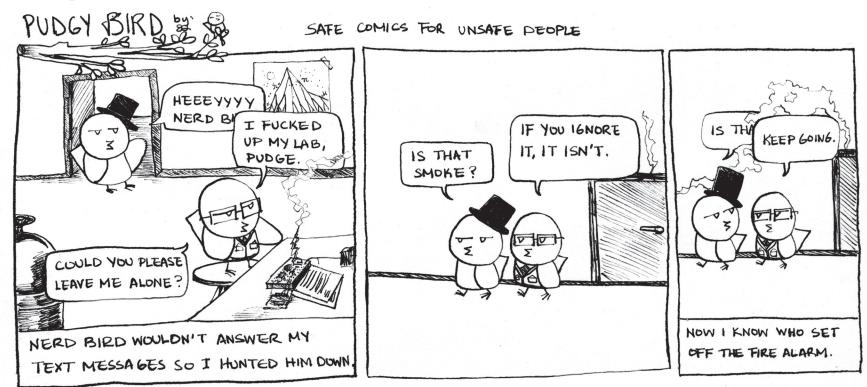
36 Even, as a sports score

- 37 Plots of ground for planting
- 39 Airless tire 40 Search for
- 42 Gratify
- 18 19 20 25 | 26 | 27 32 | 33 35 38 41 58
- 43 Box-office purchase
- 45 "Santa __ Is Coming to Town"
- 46 Stovetop appliance
- 47 Eject, as lava 48 Pre-euro Italian money
- 49 Bikini tops
- 50 Wicked
- 51 Jay once of The Tonight Show
- 52 Run leisurely
- 54 Org. for Tiger Woods

Fog by Mehitabel Glenhaber



Safety First by Ivy Lii



ANTHOR NOTE: DON'T DO THIS AT HOME (OR ANYWHERE), KIDS. ALSO, LABWORK IS COOL. SAFETY FIRST!

18 THE TECH FRIDAY, <u>JUNE 08</u>, 2018

Do you wish your sport was covered?

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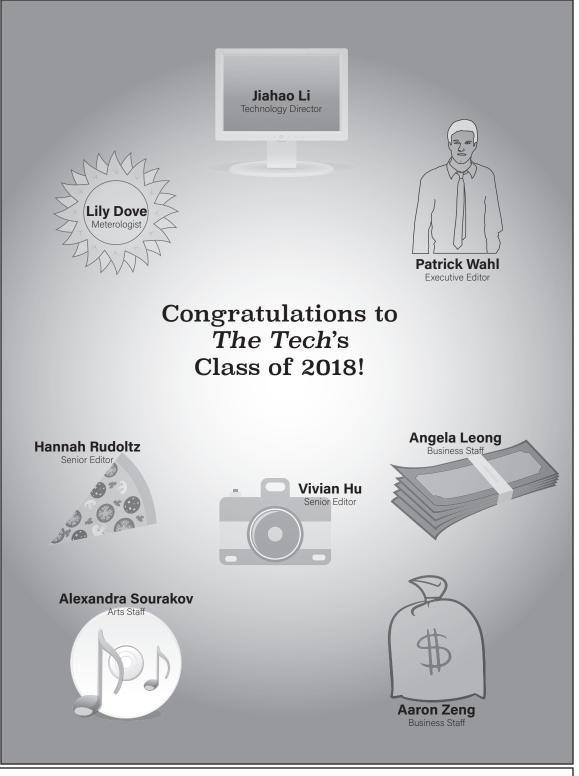
HAVE YOU EVER SEEN A STEM CELL? DO YOU KNOW HOW THEY WORK?

20.101 (2-0-4) (Fridays, 3-5) **20.102** (3-0-9)(Tues/Thurs 1-2:30) Wm. G. Thilly, Elena V. Gostjeva

Both courses start with images of the bizarre metakaryotic stem cells of organogenesis in humans and other animals and plants following their metamorphoses from conception to maturity. Next come their changes in carcinogenesis again featuring marked metamorphoses from adenomas to metastases that recreate the metakaryotic forms of organogenesis in reverse. Then come their peculiar modes of genome organization (circular chromosomes), replication (dsRNA/DNA intermediates), segregation (several amitotic modes) and, finally, restoration of dsDNA using the error prone DNA polymerases zeta and beta. This accords with measurements of mutant colonies in human lungs revealing a Luria-Delbruck distribution (look it up) and a remarkably high mutation rate in human organogenesis attributable to stem cells. Epidemiology follows with reviews of the U.S. mortality data we collected and organized from 1900 through 2010 (males, females, two large ethnic groups). One can follow the rise in lung cancer in males and females in parallel with their different histories of cigarette use. One can devise tests to detect risks for other diseases. Computer models (MATLAB) uniting the biology of stem cells with the age-specific mortality of any are introduced and applied. (http://mortalityanalysis.mit.edu) 20.215 (G) offers advanced modeling

Experiments in cell culture and human tumors reveal that metakaryotic cancer stem cells are constitutively resistant to x-rays and standard chemotherapy agents. Experiments in cell culture discover that many common medicaments are potent cancer stem cell killers if applied appropriately. First formal human clinical trial of a drug used to treat Lyme disease is found to leave nearly all pancreatic metakaryotic cancer stem cells dead or dying. Key papers for download: http://mortalityanalysis.mit.edu/AAA-METAKARYOTIC-BIOL-OGY-PUBS.

Ad supported by the Ed Jakush ('67, X) Metakaryotic Biology Fund.



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F 7:30-9 PM

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